

FILE 'REGISTRY' ENTERED AT 07:29:49 ON 16 MAY 2003

L1 0 S MOLDOSIMINE/CN
L2 1 S MOLSIDOMINE/CN
L3 1 S NITROGLYCERIN/CN
SELECT L3 1- CHEM

FILE 'CAPLUS' ENTERED AT 07:31:29 ON 16 MAY 2003

L4 136795 S E1-124
L5 23559 S CYCLODEXTRIN
L6 1781782 S CONTROL?
L7 76644 S SUSTAIN?
L8 1841381 S L6 OR L7
L9 553508 S RELEAS?
L10 104447 S L9 (L) L8
L11 17 S L10 AND L5 AND L4
L12 70588 S PROSTAGLANDIN
L13 9786 S PROSTACYCLIN
L14 6337 S PROSTANOID
L15 77546 S L12 OR L13 OR L14
L16 16 S L15 AND L5 AND L10
L17 1396620 S ALPHA OR .ALPHA.
L18 7 S L16 AND L17

L11 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:510677 CAPLUS

DOCUMENT NUMBER: 135:293831

TITLE: Preparation and characterization of novel
peracetylated **cyclodextrin** complexes

AUTHOR(S): Buchanan, C. M.; Dixon, D. W.; Offermann, R. J.;
Szejtli, J.; Szenté, L.; Vikmon, M.

CORPORATE SOURCE: Eastman Chemical Company, Kingsport, TN, USA

SOURCE: Cyclodextrin: From Basic Research to Market,
International Cyclodextrin Symposium, 10th, Ann Arbor,
MI, United States, May 21-24, 2000 (2000), 526-536.
Wacker Biochem Corp.: Adrian, Mich.
CODEN: 69BFYD

DOCUMENT TYPE: Conference; (computer optical disk)

LANGUAGE: English

AB The pptn. method was used as a practical and reliable technique for prep. inclusion complexes of triacetyl-**cyclodextrin** (CD) that would be applicable to various different types of guest compds. The oily multicomponent vanilla and lemon exts. could be converted to solid triacetyl-CD/fragrance complexes by the pptn. method using acetone as the common solvent. Complexes of triacetyl-CD and fragrances provided an acceptable component distribution and total fragrance load. An aq. alc. soln. was the preferred common solvent in prep. triacetylated CD/**nitroglycerin** (NG) and isosorbide 5-mononitrate complexes. X-ray diffractometry and thermoanal. investigations demonstrated complex formation in solid state. Complexation considerably reduced the volatility, thermal and storage stability problems of the complexed guests. Triacetyl-.beta.-CD could be considered as a multiparticulate **sustained release** carrier matrixes and may be useful for the prep. of **sustained release** drug formulations.

L11 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:275378 CAPLUS

DOCUMENT NUMBER: 132:298866

TITLE: Active substance-releasing stents, their production
and use for prophylaxis of restenosis

PATENT ASSIGNEE(S): Schering A.-G., Germany

SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19849464	A1	20000427	DE 1998-19849464	19981021
PRIORITY APPLN. INFO.:			DE 1998-19849464	19981021

AB Metal or polymer stents are coated with a polymer to which **cyclodextrin** mols. are attached directly or via a linking mol. for binding an active substance. The active substance can be loaded on the **cyclodextrin** at any time from stent manuf. up to implantation, and a wide variety of active substances can be loaded onto stents in this manner for **sustained release** in vivo. Thus, a stent was dip-coated with a CHCl₃ soln. of an NH₂ group-contg. polyester-polyurethane to a thickness of 20 .mu.m after drying, and then exposed to an acid chloride deriv. of **cyclodextrin**. The coated stent was loaded with iloprost by immersion in an aq. soln. contg. 10 ng-100 .mu.g iloprost/mL, washed, and dried.

L11 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:196091 CAPLUS

DOCUMENT NUMBER: 131:35743

TITLE: **Release-control** of a water-soluble
drug by film-forming trivaleryl .beta.-
cyclodextrin

AUTHOR(S): Yamada, Masaya; Hirayama, Fumitoski; Uekama, Kaneto

CORPORATE SOURCE: Department of Physical Pharmaceuticals, Faculty of
Pharmaceutical Sciences, Kumamoto University,
Kumamoto, 862-0973, Japan

SOURCE: Drug Delivery System (1999), 14(1), 27-32

CODEN: DDSYEI; ISSN: 0913-5006

PUBLISHER: Nippon DDS Gakkai Jimukyoku

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Among various acylated .beta.-**cyclodextrins** where all hydroxyl groups are substituted by different acyl groups, trivaleryl .beta.-**cyclodextrin** (TV-.beta.-CyD) preferentially formed a transparent,

adhesive thin-film. When an ethanol soln. of TV-.beta.-CyD was spread on the backing membranes such as a polyethylene terephthalate film, polyethylene film and an aluminum foil, a transparent film was formed, the film being tightly stuck on the membranes. The detaching force of TV-.beta.-CyD film was higher and the decrease in the force by the addn. of oleic acid was smaller than that of a com. silicone pressure-sensitive adhesive which is used in transdermal drug delivery system. A vasodilator, isosorbide dinitrate (ISDN), was incorporated in the TV-.beta.-CyD film in molar ratios of 1:1 and 2:1 (ISDN: TV-.beta.-CyD). The release rate of ISDN from the TV-.beta.-CyD film increased with an increase in the film area, and slightly increased by the addn. of oleic acid in the film. The plasma levels of ISDN after topical application of the TV-.beta.-CyD film contg. ISDN to abdominal skin of rats were maintained at 100 ng/mL for about 10 h. Thus, the TV-.beta.-CyD film can serve as a drug reservoir for prolonged release of water-sol. drugs in transdermal prepsns.

L11 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:668084 CAPLUS
DOCUMENT NUMBER: 129:293887
TITLE: An anti-spasmodic and antiinflammatory composition containing a NSAID, pitofenone and fempiverinium
INVENTOR(S): Singh, Amarjit; Jain, Rajesh
PATENT ASSIGNEE(S): Panacea Biotec Ltd., India
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 868915	A1	19981007	EP 1997-302248	19970402

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI

PRIORITY APPLN. INFO.: EP 1997-302248 19970402

AB A compn. comprising at least one non-steroidal antiinflammatory drug, their salts, their chirally pure forms, isomers and derivs., analogs and adducts thereof and two drugs pitofenone hydrochloride and fempiverinium bromide in a pharmaceutically acceptable combination. Diclofenac sodium at 20 .mu.g/mL increased the 0.5 ng/mL fempiverinium bromide inhibition of acetylcholine from 4.38 to 100%. A tablet contained diclofenac 46.5, pitofenone hydrochloride 5.0, fempiverinium bromide 0.1, microcryst. cellulose 102.0, Aerosil-200 5.0, starch 50.0, povidone 1.5, magnesium stearate 1.0, talc 2.9, and Ac-di sol 10 mg.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:293427 CAPLUS
DOCUMENT NUMBER: 129:8597
TITLE: Embedding and encapsulation of controlled release particles
INVENTOR(S): Van Lengerich, Bernhard H.
PATENT ASSIGNEE(S): Van Lengerich, Bernhard H., USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9818610	A1	19980507	WO 1997-US18984	19971027

W: AU, CA, JP, NO, PL, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

AU 9749915	A1	19980522	AU 1997-49915	19971027
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AU 744156	B2	20020214		
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EP 935523	A1	19990818	EP 1997-912825	19971027
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2002511777	T2	20020416	JP 1998-520558	19971027
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NO 9902036	A	19990428	NO 1999-2036	19990428
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PRIORITY APPLN. INFO.: US 1996-29038P P 19961028

US 1997-52717P P 19970716

WO 1997-US18984 W 19971027

AB Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive

or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant. A **release-rate controlling** component is incorporated into the matrix to **control** the rate of **release** of the encapsulant from the particles. The addnl. component may be a hydrophobic component or a high water binding capacity component for extending the **release** time. The plasticizable matrix material, such as starch, is admixed with at least one plasticizer, such as water, and at least one **release -rate controlling** component under low shear mixing conditions to plasticize the plasticizable material without substantially destroying the at least one plasticizable material and to obtain a substantially homogeneous plasticized mass. The plasticizer content is substantially reduced and the temp. of the plasticized mass is substantially reduced prior to admixing the plasticized mass with the encapsulant to avoid substantial destruction of the encapsulant and to obtain a formable, extrudable mixt. The mixt. is extruded through a die without substantial or essentially no expansion and cut into discrete, relatively dense particles. **Release** properties may also be **controlled** by precoating the encapsulant and/or coating the extruded particles with a film-forming component. An example of encapsulation of acetylcysteine is given using starch, polyethylene, glycerol monostearate, and vegetable oil.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:290091 CAPLUS
DOCUMENT NUMBER: 129:36549
TITLE: Neurosteroid modulation of arterial baroreflex-sensitive neurons in rat rostral ventrolateral medulla
AUTHOR(S): Laiprasert, J. D.; Rogers, R. C.; Heesch, C. M.
CORPORATE SOURCE: Dep. of Physiology, Ohio State University, Columbus, OH, 42310-1218, USA
SOURCE: American Journal of Physiology (1998), 274(4, Pt. 2), R903-R911
CODEN: AJPHAP; ISSN: 0002-9513
PUBLISHER: American Physiological Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The major metabolite of progesterone, 3.alpha.-OH-dihydroprogesterone (3.alpha.-OH-DHP), is the most potent endogenous pos. modulator of central nervous system GABAA receptors. Acute i.v. administration of 3.alpha.-OH-DHP to virgin female rats potentiates arterial baroreflex sympathoinhibitory responses. The current expts. tested the possibility that circulating 3.alpha.-OH-DHP potentiates central GABAergic influences in the rostral ventrolateral medulla (RVLM). The unit activity of spontaneously active, spinally projecting, and arterial pressure-sensitive neurons was recorded in the RVLM of urethane-anesthetized rats. Arterial pressure sensitivity of RVLM neurons was tested before (control) and 10 min after bolus injection (44 .mu.l i.v.) of 3.alpha.-OH-DHP (1.12 .mu.g/kg) or vehicle (40% .beta.-cyclodextrin). Both threshold pressure and satn. pressure for inhibition of RVLM neurons were decreased after acute administration of a physiol. dose of 3.alpha.-OH-DHP (1.12 .mu.g/kg i.v.), which produces plasma concns. similar to those seen during pregnancy (20-30 ng/mL), suggesting potentiated responsiveness to endogenously released GABA. Following suppression by 3.alpha.-OH-DHP, high doses of the inactive stereoisomer 3.beta.-OH-DHP (112-224 .mu.g/kg i.v.) restored unit activity, presumably by displacing 3.alpha.-OH-DHP from the neurosteroid binding site on GABAA receptors.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:606360 CAPLUS
DOCUMENT NUMBER: 127:267940
TITLE: Controlled-release of diltiazem by a combination of short- and long-chain peracylated .beta.-cyclodextrins in dogs
AUTHOR(S): Soliman, O. A.; Kimura, K.; Hirayama, F.; Uekama, K.; El-Sabbagh, H. M.; Abd El-Gawad, A. H.; Hashim, F. M.
CORPORATE SOURCE: Faculty of Pharmacy, Mansoura University, Mansoura, 35516, Egypt
SOURCE: Pharmaceutical Sciences (1996), 2(11), 533-536
CODEN: PHSCFB; ISSN: 1356-6881
PUBLISHER: Royal Pharmaceutical Society of Great Britain
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The **release** characteristics of diltiazem were modified by short-

and long-chain peracylated .beta.-cyclodextrins, peracetyl-.beta.-cyclodextrin (TA-.beta.-CyD) and peroctanoyl-.beta.-cyclodextrin (TO-.beta.-CyD), and their combination in different molar ratios. The **release** rates of diltiazem from both powder and compressed tablets consisting of diltiazem/TA-.beta.-CyD/TO-.beta.-CyD decreased in the order of diltiazem alone (t1/2 = 1 min (powder) and 1 min (tablets)) < diltiazem/TA-.beta.-CyD complex (1: 1, t1/2=9 min and 9 min) < diltiazem/TA-.beta.-CyD complex (1: 2, t1/2 = 19 min and 38 min) < diltiazem/TA-.beta.-CyD/TO-.beta.-CyD ternary system (1: 2: 0.25, t1/2=45 min and 110 min) < diltiazem/TA-.beta.-CyD/TO-.beta.-CyD ternary system (1: 2: 0.5, t1/2=140 min and > 4 h), resp. The retarded **release** rates of diltiazem from the TA-.beta.-CyD and TA-.beta.-CyD/TO-.beta.-CyD systems were clearly reflected in blood diltiazem levels after oral administration of tablets in dogs. With administration of the diltiazem/TA-.beta.-CyD complex (1: 2), plasma diltiazem levels of over 20 ng mL⁻¹ were maintained for at least 24 h, and the area under plasma concn.-time curve (AUC) was 2.5-times greater than that of the drug alone. Further, the diltiazem/TA-.beta.-CyD/TO-.beta.-CyD ternary system (1: 2: 0.5) gave a const. plasma level (18-40 ng mL⁻¹) for more than 48 h, with significant increase in AUC. These results indicate that a combination of short- and long-chain peracylated .beta.-CyDs may serve as superior carriers for the **sustained release** of water-sol. drugs.

L11 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:226984 CAPLUS

DOCUMENT NUMBER: 120:226984

TITLE: Compositions of oral nondissolvable matrixes for transmucosal administration of medicaments

INVENTOR(S): Stanley, Theodore H.; Hague, Brian

PATENT ASSIGNEE(S): University of Utah Research Foundation, USA

SOURCE: U.S., 20 pp. Cont.-in-part of U.S. 4,863,737.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5288498	A	19940222	US 1989-403752	19890905
US 4671953	A	19870609	US 1985-729301	19850501
EP 487520	A1	19920603	EP 1989-909497	19890816
EP 487520	B1	19950412		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 05501539	T2	19930325	JP 1989-504878	19890816
JP 2801050	B2	19980921		
AU 641127	B2	19930916	AU 1989-40704	19890816
AT 120953	E	19950415	AT 1989-909497	19890816
CA 1338978	A1	19970311	CA 1989-609378	19890824
AU 9050352	A1	19910408	AU 1990-50352	19890905
AU 645966	B2	19940203		
EP 493380	A1	19920708	EP 1990-902584	19890905
EP 493380	B1	19971029		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 5132114	A	19920721	US 1989-402881	19890905
JP 05501854	T2	19930408	JP 1990-502779	19890905
CA 1339075	A1	19970729	CA 1989-610329	19890905
AT 159658	E	19971115	AT 1990-902584	19890905
WO 9103236	A1	19910321	WO 1990-US4369	19900803
W: AU, CA, JP, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
AU 9063371	A1	19910408	AU 1990-63371	19900803
AU 642664	B2	19931028		
EP 490944	A1	19920624	EP 1990-913359	19900803
EP 490944	B1	19960529		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 05500058	T2	19930114	JP 1990-512483	19900803
JP 2749198	B2	19980513		
AT 138562	E	19960615	AT 1990-913359	19900803
ES 2089027	T3	19961001	ES 1990-913359	19900803
CA 2066403	C	19980414	CA 1990-2066403	19900803
NO 9200565	A	19920213	NO 1992-565	19920213
DK 9200193	A	19920214	DK 1992-193	19920214
NO 9200858	A	19920304	NO 1992-858	19920304
NO 9200855	A	19920410	NO 1992-855	19920304
NO 9200854	A	19920427	NO 1992-854	19920304
DK 9200300	A	19920505	DK 1992-300	19920305
AU 9460697	A1	19940623	AU 1994-60697	19940427

US 5855908 A 19990105 US 1994-339655 19941115
 PRIORITY APPLN. INFO.:
 US 1985-729301 A2 19850501
 US 1987-60045 A2 19870608
 EP 1989-909497 A 19890816
 WO 1989-US3518 W 19890816
 US 1989-403752 A 19890905
 WO 1989-US3801 A 19890905
 WO 1990-US4369 A 19900803
 US 1993-152414 B1 19931112

AB Compns. and methods of manuf. for producing a medicament compn. capable of absorption through the mucosal tissues of the mouth, pharynx, and esophagus are disclosed. The present invention relates to such compns. and methods which are useful in administering lipophilic and nonlipophilic drugs in a dose-to-effect manner such that sufficient drug is administered to produce precisely a desired effect. The invention also relates to manufg. techniques that enable therapeutic agents to be incorporated into nondissolvable drug containment matrixes which are capable of releasing the drug within a patient's mouth. An appliance or holder is preferably attached to the drug containment matrix. Employing the present invention the drug may be introduced into the patient's bloodstream almost as fast as through injection, and much faster than using the oral administration route, while avoiding the neg. aspects of both of these methods. The nondissolvable drug containment matrix may include permeation enhancers to increase the drug adsorption by the mucosal tissues of the mouth. The matrix compn. may also include pH buffering agents to modify the saliva pH thereby increasing the absorption of the drug through the mucosal tissues. Figures show views of some dosage forms.

L11 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1994:226981 CAPLUS
 DOCUMENT NUMBER: 120:226981
 TITLE: Compositions of oral dissolvable medicaments
 INVENTOR(S): Stanley, Theodore H.; Hague, Brian
 PATENT ASSIGNEE(S): University of Utah, USA
 SOURCE: U.S., 22 pp. Cont.-in-part of U.S. 4,863,737.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 9
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5288497	A	19940222	US 1989-403751	19890905
US 4671953	A	19870609	US 1985-729301	19850501
EP 487520	A1	19920603	EP 1989-909497	19890816
EP 487520	B1	19950412		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 05501539	T2	19930325	JP 1989-504878	19890816
JP 2801050	B2	19980921		
AU 641127	B2	19930916	AU 1989-40704	19890816
AT 120953	E	19950415	AT 1989-909497	19890816
CA 1338978	A1	19970311	CA 1989-609378	19890824
AU 9050352	A1	19910408	AU 1990-50352	19890905
AU 645966	B2	19940203		
EP 493380	A1	19920708	EP 1990-902584	19890905
EP 493380	B1	19971029		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 5132114	A	19920721	US 1989-402881	19890905
JP 05501854	T2	19930408	JP 1990-502779	19890905
CA 1339075	A1	19970729	CA 1989-610329	19890905
AT 159658	E	19971115	AT 1990-902584	19890905
WO 9103237	A1	19910321	WO 1990-US4384	19900803
W: AU, CA, JP, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
AU 9062877	A1	19910408	AU 1990-62877	19900803
AU 645265	B2	19940113		
EP 490916	A1	19920624	EP 1990-912733	19900803
EP 490916	B1	19951018		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 05503917	T2	19930624	JP 1990-512229	19900803
EP 630647	A1	19941228	EP 1994-111352	19900803
EP 630647	B1	19990303		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
AT 129148	E	19951115	AT 1990-912733	19900803
ES 2077686	T3	19951201	ES 1990-912733	19900803
CA 2066423	C	19980414	CA 1990-2066423	19900803
AT 177007	E	19990315	AT 1994-111352	19900803
ES 2133448	T3	19990916	ES 1994-111352	19900803
NO 9200565	A	19920213	NO 1992-565	19920213

DK 9200193	A	19920214	DK 1992-193	19920214
NO 9200857	A	19920406	NO 1992-857	19920304
NO 9200855	A	19920410	NO 1992-855	19920304
NO 9200854	A	19920427	NO 1992-854	19920304
DK 9200300	A	19920505	DK 1992-300	19920305
AU 9455218	A1	19940428	AU 1994-55218	19940218
AU 668004	B2	19960418		
AU 9460697	A1	19940623	AU 1994-60697	19940427
US 5824334	A	19981020	US 1996-636828	19960419
US 5783207	A	19980721	US 1997-795359	19970204
US 5785989	A	19980728	US 1997-822560	19970319

PRIORITY APPLN. INFO.:

US 1985-729301	A2	19850501
US 1987-60045	A2	19870608
EP 1989-909497	A	19890816
WO 1989-US3518	W	19890816
US 1989-403751	A	19890905
WO 1989-US3801	A	19890905
EP 1990-912733	A3	19900803
WO 1990-US4384	A	19900803
US 1993-152396	B1	19931112
US 1994-333233	B2	19941102
US 1995-439127	B1	19950511

AB Compns. and methods of manuf. for producing a medicament compn. capable of absorption through the mucosal tissues of the mouth, pharynx, and esophagus are disclosed. The present invention relates to such compns. and methods which are useful in administering lipophilic and nonlipophilic drugs in a dose-to-effect manner that sufficient drug is administered to produce precisely a desired effect. The invention also relates to a manuf. technique that enables a therapeutic agent or drug to be incorporated into a flavored dissolvable matrix. An appliance or holder is preferably attached to the dissolvable matrix. Employing the present invention the drug may be introduced into the patient's bloodstream almost as fast as through injection, and much faster than using the oral administration route, while avoiding the neg. aspects of both of these methods. The present invention achieves these advantages by incorporating the drug into a carbohydrate, fat, protein, wax, or other dissolvable matrix compn. The dissolvable matrix may include permeation enhancers to increase the drug absorption by the mucosal tissues of the mouth. The matrix compn. may also include pH buffering agents to modify the salival pH thereby increasing the absorption of the drug through the mucosal tissue. Methohexital sodium was incorporated into a dissolvable matrix including citric acid; ribotide; Compritol 888; aspartame; vanilla, wild cherry, and peppermint microcapsules; compressible sugar; and maltodextrin.

L11 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1993:567775 CAPLUS
 DOCUMENT NUMBER: 119:167775
 TITLE: Nonirritating **nitroglycerin** oral preparations
 INVENTOR(S): Sawai, Kiichi; Kurono, Masatsune; Kondo, Yasuaki;
 Sato, Makoto; Sugimoto, Manabu
 PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05163140	A2	19930629	JP 1991-333615	19911217
PRIORITY APPLN. INFO.:			JP 1991-333615	19911217

AB The title pharmaceutical compns. for e.g. sublingual application are manufd. by dissolving or dispersing **nitroglycerin** and **nitroglycerin-compatible carriers** (e.g. fructose) in a medium and adsorbing the soln. or dispersion on a high mol.-wt. substance (e.g. hypoxypopyl cellulose). The prepns. are free of unpleasant and irritating taste and stable and show excellent **controlled-release**.

L11 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1992:158690 CAPLUS
 DOCUMENT NUMBER: 116:158690
 TITLE: Bioavailability of leuprolide acetate following nasal and inhalation delivery to rats and healthy humans
 AUTHOR(S): Adjei, Akwete; Sundberg, Dean; Miller, James; Chun, Alexander
 CORPORATE SOURCE: Pharm. Prod. Div., Abbott Lab., North-Chicago, IL,

SOURCE: 60064, USA
Pharmaceutical Research (1992), 9(2), 244-9
CODEN: PHREEB; ISSN: 0724-8741
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Systemic delivery of leuprolide acetate, a LH releasing hormone (LHRH) agonist, was compared after inhalation (i.h.) and intranasal (i.n.) administration. The i.n. bioavailability in rats was significantly increased by .alpha.-cyclodextrin (CD), EDTA, and soln. vol. Intraanimal variability was 30-60%, and absorption ranged from 8 to 46% compared to i.v. controls. Studies in healthy human males were conducted with leuprolide acetate i.n. by spray, or inhalation aerosol (i.h.), and s.c. and i.v. injections. The s.c. injection was 94% bioavailable compared with i.v. The i.n. bioavailability averaged 2.4%, with significant subject-to-subject variability. Plasma peak concns. (Cmax) with 1- and 3-mg dosages ranged between 0.24-1.6 and 0.10-11.0 ng/mL, resp. The low human bioavailability may be due to phys. loss of drug down the oral cavity and differences between human and rat nasal mucosa. Inhalation delivery gave a slightly lower intersubject variability. Mean Cmax with a 1-mg dose of soln. aerosol was 0.97 ng/mL, compared with 4.4 and 11.4 ng/mL for suspension aerosols given at 1- and 2-mg bolus dosages, resp. The mean bioavailability of the suspension aerosols (28% relative to s.c. administration) was 4-fold greater than that of the soln. aerosol (6.6%), suggesting that LHRH analogs may be delivered systemically via the lung as aerosol dispersions.

L11 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:542119 CAPLUS
DOCUMENT NUMBER: 115:142119
TITLE: Effect of .beta.-cyclodextrins on
sustained release of

AUTHOR(S): nitroglycerin from ointment bases
Tomono, Kazuo; Gotoh, Hiroko; Okamura, Makoto;
Horioka, Masayoshi; Ueda, Haruhisa; Nagai, Tuneji
CORPORATE SOURCE: Coll. Pharm., Nihon Univ., Chiba, 274, Japan
SOURCE: Yakuzaigaku (1991), 51(1), 22-8
CODEN: YAKUA2; ISSN: 0372-7629

DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The effect of .beta.-cyclodextrin (.beta.-CyD) and water-sol. .beta.-cyclodextrin-epichlorohydrin polymer (CDPS) on release behavior of nitroglycerin (TNG) from ointment base were investigated in comparison with that of TNG alone. In order to evaluate their percutaneous absorption, samples were applied to the shaved back skin of rabbits. It was found that TNG/.beta.-CyD complex of ointment showed the longest depression of blood pressure, and also maintained at a plateau for 8 h after application in plasma TNG level. This in vivo result was consistent with those of the in vitro dissoln. expt. It was suggested that TNG/.beta.-CyD complex might be applicable to sustained-release preps. for percutaneous administration.

L11 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:192366 CAPLUS
DOCUMENT NUMBER: 114:192366
TITLE: Effect of diethyl .beta.-cyclodextrin on the
release of nitroglycerin from formulations

AUTHOR(S): Umemura, Masashi; Ueda, Haruhisa; Tomono, Kazuo;
Nagai, Tsuneji
CORPORATE SOURCE: Fac. Pharm. Sci., Hoshi Univ., Tokyo, 142, Japan
SOURCE: Drug Design and Delivery (1990), 6(4), 297-310
CODEN: DDDEEJ; ISSN: 0884-2884

DOCUMENT TYPE: Journal
LANGUAGE: English

AB The complex-forming abilities of 2,6-di-O-ethyl-.beta.-cyclodextrin (DE-.beta.-CD), and its effect on the release of nitroglycerin (TNG) from formulations of the compd., were studied and compared with corresponding properties of .beta.-cyclodextrin (.beta.-CD) and 2,6-di-O-methyl-.beta.-cyclodextrin (DM-.beta.-CD). Complex formation was confirmed by DSC and IR absorption spectroscopy. In an accelerator test involving temp. and reduced pressure, marked depression of the volatility of TNG was obsd. as a result of CD complex formation. Dissoln. rats of TNG from powdery TNG/DE-.beta.-CD complex and its tablets were retarded in comparison with the rates from other CD complexes. The release rate of TNG from ointments was accelerated by complexation with DE-.beta.-CD, and retarded by complexation with .beta.-CD. To evaluate their in vivo percutaneous absorption, samples were applied to the inside tip of the cheek pouch of male golden hamsters. The amt. of TNG remaining

in the cheek pouch was lowest in the case of the TNG/DE-.beta.-CD complex ointment, and relatively high in the case of the TNG/.beta.-CD complex ointment, in agreement with the in vitro results. The combination of DE-.beta.-CD complex and .beta.-CD complex might be applicable to **sustained-release** preps. for percutaneous administration.

L11 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:25671 CAPLUS
DOCUMENT NUMBER: 112:25671
TITLE: Pharmaceuticals for intranasal administration
INVENTOR(S): Sawai, Kiichi; Kurono, Masatsune; Kato, Bunkichi
PATENT ASSIGNEE(S): Sanwa Kagaku Kenkyusho Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01117825	A2	19890510	JP 1987-272595	19871028
PRIORITY APPLN. INFO.:			JP 1987-272595	19871028

AB Intranasal formulations contain pharmaceuticals (antibiotics, hormones, psychotropics, etc.), absorption control agents (cyclodextrin, lactose, CM-cellulose, etc.), and fillers (Macrogol, glycerogelatin, etc.) which dissolve slowly at body heat. These formulations **release** the pharmaceuticals at a const. rate for a long time. Thus, 2 .times. 106 IU interferon was adsorbed on 50 mg cyclodextrin, dispersed in Macrogol, and made into a powder. An app. for the intranasal administration is shown by diagrams.

L11 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:173559 CAPLUS
DOCUMENT NUMBER: 108:173559
TITLE: **Sustained-release** transdermal preparations of 2-nitroxymethyl-6-chloropyridine and its cyclodextrin inclusion compounds as vasodilators
INVENTOR(S): Ueda, Yoshio; Asakura, Sotoo; Murakami, Yoshio; Shimojo, Fumio; Kado, Kazutake
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 241806	A1	19871021	EP 1987-104782	19870401
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4749574	A	19880607	US 1987-32628	19870401
JP 63045219	A2	19880226	JP 1987-85950	19870408
PRIORITY APPLN. INFO.:			JP 1986-86589	19860414
OTHER SOURCE(S): CASREACT 108:173559				

AB **Sustained-release** transdermal pharmaceuticals contain 2-nitroxymethyl-6-chloropyridine (I) or its inclusion compds. with .beta.-cyclodextrin, which are prepd. 2-Hydroxymethyl-6-chloropyridine was treated with fuming HNO3 to give I, which was treated with .beta.-cyclodextrin to give the 1:1 (II) or 3:1 I-.beta.-cyclodextrin inclusion compd. II (1.3 kg) was coated onto 1.0 kg nonpareil using a 715 g 50% sucrose soln. as a binder. The granules (200 g) were coated with Eudragit E30D 89.0, talc 6.6, PEG-6000 1.8, and water 171.0 g, to give 235.3 g dried product, which (77 mg; 5 mg as I) was added to agar 40 mg, water 700 mL, and glycerol 300 mg. The dispersion was cast into an 0.2 cm-deep mold with a diam. of 2.5 cm and allowed to stand at room temp. to give a **sustained-release** transdermal delivery pad. In rats, this pad gave blood level of I of 13-18 ng/mL for 24 h (except for 32 ng/mL I at 20 h).

L11 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:578359 CAPLUS
DOCUMENT NUMBER: 105:178359
TITLE: Tableting of a nitroglycerin inclusion compound and investigation of the **sustained-release** tablets
AUTHOR(S): Kata, Mihaly; Wayer, Maria; Szabo Revesz, Piroska;

Kedvessy, Gyorgy; Stadler-Szoke, Agnes; Szejtli, Jozsef
 Pharm.-Chem. Werk, CHINOIN A.-G., Budapest, Hung.
 Acta Pharmaceutica Hungarica (1986), 56(4), 157-63
 CODEN: APHGAO; ISSN: 0001-6659

CORPORATE SOURCE:
 SOURCE:

DOCUMENT TYPE:
 LANGUAGE: Journal
 German

AB Tablets contg. **nitroglycerin-.beta.-cyclodextrin** complex (I) [58195-87-2] were prepd. with a **nitroglycerin** content of 13.4% by using excipients, lactose, Avicel PH 101, Mg stearate and Aerosil R 972. The phys. properties of the tablets, disintegration time, compression strength and abrasion loss were detd. The drug (100%) was dissolved after 8-9 min from the complex, while only 80-85% drug dissolved from the com. tablets in 8-9 min. The release of the drug from the complex tablets was studied by using propeller-stirrer and USP XX methods. After 1 h stirring 60 and 50% drug dissolved (propeller and USP XX methods., resp.). The tablets showed delayed-release behavior. Tests of tablets heat treated at 50.degree. showed that the drug content of the I tablets was between 96 and 104% and did not decrease. The com. tablets, however, showed only 96.2% of the declared content; the content after 1 day was 35% and after 2 days decreased to 30%.

L11 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1982:11681 CAPLUS
 DOCUMENT NUMBER: 96:11681
 TITLE: Drug-containing bandages
 PATENT ASSIGNEE(S): Nitto Electric Industrial Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56123912	A2	19810929	JP 1980-28404	19800305
JP 02040645	B4	19900912		

PRIORITY APPLN. INFO.: JP 1980-28404 19800305

AB Bandages contg. drugs like **nitroglycerin** [55-63-0] (a vasodilator) are prepd. using inclusion agents such as **cyclodextrin** and adhesive polymers which release the drugs over a prolonged period. Thus, 12 mL acetone contg. 6 g **nitroglycerin** was slowly added to 700 mL water contg. 40 g **.beta.-cyclodextrin** [7585-39-9] at 70.degree. to produce a white ppt. which was isolated and dried to obtain a powdery inclusion compd. (35 g) contg. 12.3 wt. % **nitroglycerin**. This product (25 parts) was added to 75 parts ethylene-vinyl acetate copolymer [24937-78-8] which had been dissolved in CHCl₃, and the mixt. was spread over (80 .mu. thick) on a film and dried to obtain a bandage.

L18 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:558022 CAPLUS
 DOCUMENT NUMBER: 127:267835
 TITLE: Skin and dentifrice compositions containing oil-soluble substances or peptides
 INVENTOR(S): Takei, Masumi
 PATENT ASSIGNEE(S): NOEVIR Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09216810	A2	19970819	JP 1996-48251	19960208
PRIORITY APPLN. INFO.:			JP 1996-48251	19960208

AB Title compns. contain .gtoreq.1 cyclodextrin polymer tubes that include oil-sol. substances or peptides. The compns. show improved stability and controlled-release of biol. active substances or peptides. A skin lotion contg. EtOH 5.0, hydroxyethyl cellulose 1.0, squalane-.beta.-cyclodextrin inclusion compd. 20.0, .alpha.-hydroxystearic acid-.alpha.-cyclodextrin inclusion compd. 10.0, and H2O 64.0 wt.% was stable at 25.degree. for 3 mo.

L18 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:617508 CAPLUS
 DOCUMENT NUMBER: 123:1295
 TITLE: 17.beta.-Estradiol stimulates prostacyclin, but not endothelin-1, production in human vascular endothelial cells
 AUTHOR(S): Mikkola, Tomi; Turunen, Pertti; Avela, Kristiina; Orpana, Arto; Viinikka, Lasse; Ylikorkala, Olavi
 CORPORATE SOURCE: Departments of Obstetrics and Gynecology and Clinical Chemistry, University of Helsinki, Helsinki, SF-00290, Finland
 SOURCE: Journal of Clinical Endocrinology and Metabolism (1995), 80(6), 1832-6
 CODEN: JCEMAZ; ISSN: 0021-972X
 PUBLISHER: Endocrine Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The exact mechanisms by which estrogens protect against occlusive vascular disorders are not known. One possibility could be an effect on vascular endothelial vasoactive compds., such as vasodilatory prostacyclin (PGI2) and vasoconstrictory endothelin (ET-1). Here we report on the effect of 17.beta.-estradiol on the synthesis of PGI2 and ET-1 in cultured human umbilical vein endothelial cells. These cells were incubated in the absence (control) and presence of 17.beta.-estradiol (0.001-1 .mu.mol/L) for 3-24 h with serum (10%) or without serum. The release of PGI2, as assessed by its metabolite 6-keto-prostaglandin F1.alpha., and that of ET-1, were assessed by RIA. 17.beta.-Estradiol (0.01-0.1 .mu.mol/L) predissolved in ethanol (final concn., 0.01%) increased PGI2 prodn. by 26-30% in endothelial cells incubated without serum. This increase in PGI2 prodn. was enhanced up to 66% when 17.beta.-estradiol (1 .mu.mol/L) was encapsulated within .beta.-cyclodextrin. The stimulation of PGI2 prodn. was detectable after 12 h of incubation. The 17.beta.-estradiol-induced stimulation of PGI2 prodn. was blocked in dose-dependent manner by antiestrogenic tamoxifen. 17.beta.-Estradiol failed to affect the prodn. of PGI2 if the endothelial cells were incubated with serum and had no effect on ET-1 prodn. under any conditions. 17.beta.-Estradiol-induced stimulation of vasodilatory and antiaggregatory PGI2 prodn. without a concomitant change in vasoconstrictory ET-1 prodn. may provide one explanation for the ability of estradiol to maintain vascular health and protect against vascular disorders.

L18 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:411740 CAPLUS
 DOCUMENT NUMBER: 109:11740
 TITLE: Heat- and water-sensitive amphiphilic polymeric adhesive as base for transdermal drug delivery
 INVENTOR(S): Shikunami, Yasuo; Sasatani, Seiei
 PATENT ASSIGNEE(S): Takiron Co., Ltd., Japan; Ono Pharmaceutical Co., Ltd.
 SOURCE: Eur. Pat. Appl., 80 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 245858	A2	19871119	EP 1987-106969	19870514
EP 245858	A3	19900411		
EP 245858	B1	19920729		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 63146812	A2	19880618	JP 1987-83772	19870407
JP 07025666	B4	19950322		
AT 78706	E	19920815	AT 1987-106969	19870514
ES 2043619	T3	19940101	ES 1987-106969	19870514
PRIORITY APPLN. INFO.:			JP 1986-108633	19860514
			JP 1987-83772	19870407
			EP 1987-106969	19870514

AB An adhesive for transdermal drug delivery contains a base component mainly comprising a heat- and water-sensitive amphiphilic polymer; the drug is incorporated into the base layer. The polymer is a block copolymer with hydrophilic and hydrophobic segments which allows a broad range of liq. or solid hydrophilic or hydrophobic drugs to be stably dissolved or dispersed. A block copolymer was prepd. which contained segments of poly-epsilon-caprolactone (mol. wt. 530), polypropylene glycol (mol. wt. 400), polyethylene glycol (mol. wt. 1000), and hexamethylene diisocyanate; it had a m.p. of 36-37.degree.. The polymer (100 mg) was melted and 3.333 mg .alpha.-cyclodextrin-clathrated 17S,20-dimethyl-trans-DELTA.2-PGE1 was blended and dispersed therein. The drug-contg. polymer did not change when stored sealed under vacuum for 6 mo. at .ltoreq.25.degree.. The mixt. was covered with a porous membrane of phase-sepd. crosslinked gelatin-dextran and reinforced with nylon tricot mesh; on human skin, this compn. released 60-70% of the drug in 72 h, indicating the release pattern had a relatively uniform gradient. When this device was applied to spontaneously hypertensive rats at 1 mg/kg, the blood pressure was decreased for .gtoreq.24 h, whereas a conventional PGE ointment did not provide a sustained effect.

L18 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:401387 CAPLUS

DOCUMENT NUMBER: 109:1387

TITLE: Effects of analogs of thromboxane A2 and prostacyclin on calcium-45 release from neonatal mouse calvaria

AUTHOR(S): Saitoh, Shigeru

CORPORATE SOURCE: Sch. Dent., Showa Univ., Yamanashiken, Japan

SOURCE: Showa Shigakkai Zasshi (1987), 7(2), 147-53

CODEN: SSZADC; ISSN: 0285-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Effects of the TXA2 analog 9,11-epithio-11,12-methano-TXA2 (STA2) and the PGI2 analog 5(E)-6,9-deoxa-6,9.alpha.-methylene-15-cyclopentyl-16,17,18,19,20-pentanor-PGI2 .alpha.-cyclodextrin clathrate (OP 41483) on bone resorption were studied in vitro in comparison with that of PGE2. In measuring the release of 45Ca under culture, using 45Ca previously incorporated in neonatal mouse calvaria as an indicator, an increase in the release of 45Ca was obsd. only at high doses such as 10-5 M and 10-4 M of both STA2 and OP 41483. This bears a close resemblance to the resorptive conditions in the concn. range of PGE2, known as a strong bone resorptive factor, from 10-8 M to 10-5 M. PGE2, STA2, and OP 41483 have a resorption potency ratio of approx. 100:3:1. In a time-course study followed for observing the activities responsible for bone resorption of these 3 reagents at 6, 24, 48, and 72 h, each of the reagents used showed a linear increase with the passage of time. In the expt. measuring cAMP, the culturing time was limited to 10 min because of its activity time being very short and the reagents (PGE2, STA2, and OP 41483) in a concn. 10 times as high as that of those used in other five expts. were used. As a result, it was indicated that cAMP prodn. level of PGE2, STA2, and OP 41483 was almost the same, but was significantly high as compared with that of the group of controls (no reagent added), though it did not reach that of parathyroid hormone (PTH). Imidazole known as a blocker of thromboxane synthesis has an inhibitory effect on both basal bone resorption and PTH-induced bone resorption, but the addn. of STA2 and OP 41483 overcame the inhibitory effect of this substance and resulted in an effect on bone resorption. This phenomenon was almost identical to the effect produced when PGE2 was added. Examn. of the inhibitory effect on resorption of calcitonin (CT) demonstrated that it inhibits not only the resorption of basal bone, but also the bone resorption induced by STA2, OP 41483, or PGE2. The above data suggest the TXA2 and PGI2 may be responsible for

bone resorption and similar in mechanism to PGE2.

L18 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1983:40477 CAPLUS

DOCUMENT NUMBER: 98:40477

TITLE: Release control of

16,16-dimethyl-trans-.DELTA.2-prostaglandin

E1 methyl ester by cyclodextrin complexation

AUTHOR(S): Hirayama, Fumitoshi; Otagiri, Masaki; Uekama, Kaneto;
Wakuda, Toru; Inaba, Kohji

CORPORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, 862, Japan

SOURCE: Kobunshi Ronbunshu (1982), 39(10), 643-8

CODEN: KBRBA3; ISSN: 0386-2186

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Inclusion complexes of 6,16-dimethyl-trans-.DELTA.2-prostaglandin

E1 Me ester (ONO-802) with .alpha.-, .beta.-, and .gamma.-

cyclodextrin (.alpha.-, .beta.-, and .gamma.-CyD) in

water and in solid state were studied by the soly. method and by powder

x-ray diffractometry. The stability consts. of the complexes increased in
the order of .beta.-CyD-ONO-802 > .alpha.-CyD-ONO-802 >

.gamma.-CyD-ONO-802. Solid complexes of ONO-802 with .beta.- and

.gamma.-CyD in a molar ratio of 1:2 (ONO-802:2CyD) were prepd. on the

basis of the phase soly. diagram, and their soln. in water, permeation

through a cellophane membrane, and release from a suppository base

(Witepsol H-15) were examd. and compared with those of ONO-802 alone. The

apparent rates of soln. and permeation of ONO-802 were significantly

higher with the inclusion complexes (.beta.-CyD-ONO-802 >

.gamma.-CyD-ONO-802 > ONO-802 alone). Inclusion complexation was also

effective in releasing ONO-802 from the suppository base (release rate:

.beta.-CyD-ONO-802 > .gamma.-CyD-ONO-802 > ONO-802 alone).

L18 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1982:498366 CAPLUS

DOCUMENT NUMBER: 97:98366

TITLE: Stabilized, prostaglandin-containing tablets

with a controlled rate of solubility, for local use

INVENTOR(S): David, Agoston; Horvath, Tibor; Kiss, Csaba; Nagy,

Gabor; Simon, Kalman; Simonidesz, Ilona; Udvardi,

Agnes; Virag, Sandor

PATENT ASSIGNEE(S): Chinoin Gyogyszer es Vegyeszeti Termek Gyara Rt. ,
Hung.

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4335097	A	19820615	US 1981-225361	19810115
EP 56065	A1	19820721	EP 1981-100140	19810110
EP 56065	B1	19840404		
R: BE, CH, DE, FR, GB, IT, NL, SE				
JP 57123113	A2	19820731	JP 1981-3936	19810116
JP 01053251	B4	19891113		

PRIORITY APPLN. INFO.: US 1981-225361 19810115

AB Stable prostaglandin tablets for cervical and sublingual
administration consist of 1 or more prostaglandins (0.2-20), a
nontoxic buffer (0.4-40), stearic acid [57-11-4] (1-50), metal stearate
(0-15), lactose (10-95), granulation aid, disintegrants and flavoring
substances. The nontoxic buffer adjusts the pH (3-5) of the liq. film
formed on the surface of the solid phase under the influence of air
humidity. Further, by adjusting the ratio of stearic acid and alkali
earth metal stearates the ratio of release of the active
ingredient can be controlled. Thus, sublingual tablets were
prepd. contg. prostaglandin F2.alpha. (PGF2.
alpha.) [551-11-1] 0.2, lactose 42.98, poly(vinylpyrrolidone)
2.33, Na citrate [68-04-2] 0.1, citric acid [77-92-9] 0.1, stearic acid
1.67, Ca stearate [1592-23-0] 0.42, aroma .beta.-cyclodextrin
inclusion complex 1.2, and saccharin 1.0 mg. PGF2.alpha. was
dissolved in a large excess of EtOH, the soln. dild with H2O and the
homogeneous mixt. of the components was granulated using this soln. and
pressed into tablets. The tablets were administered to women in labor.
The cervical canal became smoother and the spontaneous retractions of the
womb were increased.

L18 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1975:465479 CAPLUS

DOCUMENT NUMBER: 83:65479
 TITLE: Prostaglandin granules
 INVENTOR(S): Suetani, Tamotsu; Inaba, Koji
 PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50035319	A2	19750404	JP 1973-86663	19730801
PRIORITY APPLN. INFO.:			JP 1973-86663	19730801

AB Two or more kinds of prostaglandin granule contg. different proportions of wax (b.p. 50-70.degree.), satd. fatty acid, long chain alc. and a disintegrating agent (<100 mesh) were prepd. and mixed to produce a product capable of regulating blood prostaglandin level. Thus, granules A contained beeswax 2.0, stearic acid 28.0, Ca cellulose gluconate 10.0, and PGF2.alpha.-cyclodextrin compd. [55648-21-0] 1.5 g, and granules B contained beeswax 5.0, stearic acid 25.0, Ca cellulose gluconate 5.0, and PGF2.alpha.-cyclodextrin compd. 1.5 g. A mixt. of A (400 mg) and B (1600 mg) granules produced a blood PGF2.alpha. (I) [551-11-1] peak at 1.5-3 hr after administration.

10/021,2-1
L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:784146 CAPLUS
DOCUMENT NUMBER: 132:40532
TITLE: **Acylated alkylated cyclodextrin**
and their use as carriers for drugs
INVENTOR(S): **Uekama, Kaneto**; Hirayama, Fumitoshi; Kondo,
Akira; Kawaji, Hiroshi; Ohta, Masaaki; Okamoto,
Yasuhiro
PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962958	A1	19991209	WO 1999-JP2806	19990527
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9939547	A1	19991220	AU 1999-39547	19990527
EP 1084149	A1	20010321	EP 1999-922527	19990527
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO			
JP 2002517521	T2	20020618	JP 2000-552168	19990527
PRIORITY APPLN. INFO.:			JP 1998-164465 A	19980529
			WO 1999-JP2806 W	19990527

AB **Cyclodextrin** derivs. having at least one lower alkyl group and at least one C2-20 alkanoyl group in the mol. are disclosed, and pharmaceutical prepn. wherein the derivs. and a drug are in such a state that they are closely compounded are also disclosed. These **cyclodextrin** derivs. have low hemolytic activity.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:330015 CAPLUS
DOCUMENT NUMBER: 130:343037
TITLE: **Acylated cyclodextrin-containing**
trans-mucosal or transdermal pharmaceutical
composition
INVENTOR(S): **Uekama, Kaneto**; Hirayama, Fumitoshi; Kondo,
Akira; Ohta, Masaaki; Okamoto, Yasuhiro; Kunihiro,
Haruo
PATENT ASSIGNEE(S): Janssen Pharmaceutica, N.V., Belg.
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5904929	A	19990518	US 1997-886934	19970702
PRIORITY APPLN. INFO.:			US 1997-886934	19970702

AB A pharmaceutical compn. for trans-mucosal or transdermal administration wherein a per-C2-18 **acylated cyclodextrin** is used as a drug reservoir or carrier is disclosed. The compn. can be used safely and exhibits excellent drug release behavior. Tablets administrable to oral mucosa contained triamcinolone 5, pervaleryl-.beta.-cyclodextrin 20, lactose 17, Avicel PH102 7.5, HPMC 2.5 mg, and trace amt. of magnesium stearate. The tablets were good in adhesion to the cheek, and adhesion was durable. Further, there was no irritation to mucosa at the time of application. Formulation of transdermal compns. are also disclosed.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:196091 CAPLUS
DOCUMENT NUMBER: 131:35743

TITLE: Release-control of a water-soluble drug by
film-forming trivaleryl .beta.-cyclodextrin
AUTHOR(S): Yamada, Masaya; Hirayama, Fumitoski; Uekama,
Kaneto
CORPORATE SOURCE: Department of Physical Pharmaceuticals, Faculty of
Pharmaceutical Sciences, Kumamoto University,
Kumamoto, 862-0973, Japan
SOURCE: Drug Delivery System (1999), 14(1), 27-32
CODEN: DDSYEI; ISSN: 0913-5006
PUBLISHER: Nippon DDS Gakkai Jimukyoku
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Among various acylated .beta.-cyclodextrins where all
hydroxyl groups are substituted by different acyl groups, trivaleryl
.beta.-cyclodextrin (TV-.beta.-CyD) preferentially formed a
transparent, adhesive thin-film. When an ethanol soln. of TV-.beta.-CyD
was spread on the backing membranes such as a polyethylene terephthalate
film, polyethylene film and an aluminum foil, a transparent film was
formed, the film being tightly stuck on the membranes. The detaching
force of TV-.beta.-CyD film was higher and the decrease in the force by
the addn. of oleic acid was smaller than that of a com. silicone
pressure-sensitive adhesive which is used in transdermal drug delivery
system. A vasodilator, isosorbide dinitrate (ISDN), was incorporated in
the TV-.beta.-CyD film in molar ratios of 1:1 and 2:1 (ISDN:
TV-.beta.-CyD). The release rate of ISDN from the TV-.beta.-CyD film
increased with an increase in the film area, and slightly increased by the
addn. of oleic acid in the film. The plasma levels of ISDN after topical
application of the TV-.beta.-CyD film contg. ISDN to abdominal skin of
rats were maintained at 100 ng/mL for about 10 h. Thus, the TV-.beta.-CyD
film can serve as a drug reservoir for prolonged release of water-sol.
drugs in transdermal preps.

L5 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:729652 CAPLUS
DOCUMENT NUMBER: 130:114879
TITLE: Improvements of gastrointestinal absorption and
lymphatic transfer of cyclosporin A by various
cyclodextrins
AUTHOR(S): Miyake, Kouzou; Irie, Tetsumi; Hirayama, Fumitoshi;
Uekama, Kaneto
CORPORATE SOURCE: Department of Physical Pharmaceutics, Faculty of
Pharmaceutical Sciences, Kumamoto University,
Kumamoto, 962-0973, Japan
SOURCE: Drug Delivery System (1998), 13(5), 369-375
CODEN: DDSYEI; ISSN: 0913-5006
PUBLISHER: Nippon DDS Gakkai Jimukyoku
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB The soly. of cyclosporin A (CYA), an immunosuppressive drug, in water
increased with a rise in hydrophilic cyclodextrin (CyD) concns.,
forming higher-order complexes. The solubilizing ability of hydrophilic
CyDs for CYA increased in the order .gamma.-CyD < .beta.-CyD < .alpha.-CyD
.mchlt. 2,6-dimethyl-.beta.-CyD (DM-.beta.-CyD) .apprxeq. DM-.alpha.-CyD.
The oral bioavailability of CYA was increased about 4.5-fold by the
complexation with DM-CyDs, and the variation of CYA absorption from
gastrointestinal tracts was significantly decreased. On the other hand,
the lymphatic transfer of CYA was hardly affected by the hydrophilic CyDs
including DM-CyDs. Acylated .beta.-CyDs with all hydroxyl
groups of .beta.-CyD substituted with acetyl, butanoyl and octanoyl
groups, were used as slow release carriers for CYA. When CYA/
acylated .beta.-CyDs complexes were administered orally, both
plasma and lymph concns. of CYA were prolonged up to at least 36 h,
although the bioavailability decreased particularly for the butanoyl and
octanoyl .beta.-CyDs complexes. Interestingly, triacetyl-.beta.-CyD
complex increased both plasma and lymph concns. of CYA compared with drug
alone. The oral administration of CYA as an olive oil soln. significantly
enhanced the lymph levels of CYA. The CYA/olive oil soln. in combination
with HP-CyDs, esp. HP-.gamma.-CyD, further increased plasma and lymph
levels of CYA. These results suggest that DM-CyDs are particularly useful
in improving the oral bioavailability of CYA, while hydrophobic
acylated .beta.-CyDs are useful as a prolonged-release carrier for
CYA. A CYA/olive oil soln. in combination with HP-.gamma.-CyD facilitated
the lymphatic transfer of CYA.

L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:440965 CAPLUS
DOCUMENT NUMBER: 122:273957
TITLE: Characterization of peracylated .beta.-
cyclodextrins with different chain lengths as
a novel sustained-release carrier for water-soluble

drugs
AUTHOR(S): Hirayama, Fumitoshi; Yamanaka, Masayuki; Horikawa,
Takashi; **Uekama, Kaneto**
CORPORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, 862, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1995), 43(1),
130-6
CODEN: CPBTAL; ISSN: 0009-2363
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new series of peracylated .beta.-cyclodextrins (.beta.-CyDs)
with different alkyl chains (acetyl-lauroyl) was prepd. in high purity by
acylating all hydroxyl groups of .beta.-CyD using acid anhydrides
in pyridine, and their physicochem. properties of soly., hydrolysis and
release and interaction capacity were evaluated. The soly. of peracylated
.beta.-CyDs in water decreased with lengthening alkyl chain, whereas that
in ethanol/water increased with increase in ethanol concn., but tended to
decrease at higher ethanol concn. The soly. parameter of peracylated
.beta.-CyDs was detd. by analyzing the peak-soly. phenomenon by a modified
Hildebrand equation. The alk. hydrolysis rate of peracylated .beta.-CyDs
decreased with lengthening alkyl chain, and was about 4-fold faster than
that of the corresponding fatty acid Et esters. The interaction of
perbutanoyl-.beta.-CyD (TB-.beta.-CyD) with a water-sol. drug,
molsidomine, in the solid state was investigated by differential scanning
calorimetry (DSC). The anal. of DSC curves suggested that molsidomine and
TB-.beta.-CyD form a binary solid dispersion with a 2:1
(drug:TB-.beta.-CyD) molar ratio. The rate of drug release was markedly
retarded by the combination with peracylated .beta.-CyDs in the increasing
order of the hydrophobicity of host mols.

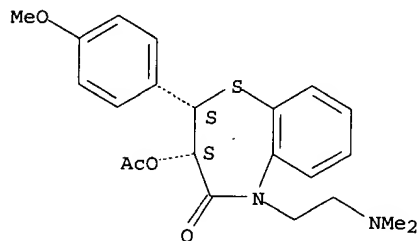
LS ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:313718 CAPLUS
DOCUMENT NUMBER: 123:122963
TITLE: Release-control of water-soluble drugs by adhesive and
film-forming acylated .beta.-
cyclodextrins
AUTHOR(S): Hirayama, Fumitoshi; **Uekama, Kaneto**
CORPORATE SOURCE: Fac. Pharm. Sci., Kumamoto Univ., Kumamoto, 862, Japan
SOURCE: Pharm Tech Japan (1995), 11(1), 19-24
CODEN: PTJAE9; ISSN: 0910-4739
PUBLISHER: Yakugyo Jihosha
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Peracylated .beta.-cyclodextrins (.beta.-CyDs) with different
alkyl chains (acetyl-lauroyl) were prepd. in high purity, and their
physicochem. properties such as soly., hydrolysis and interaction-capacity
were evaluated. Furthermore, a potential use of acylated
.beta.-CyDs as a sustained-release carrier was investigated.
Acylated .beta.-CyDs decelerated the release rate of water-sol.
drugs such as molsidomine and salbutamol hydrosulfate, in proportion to
the lengthening alkyl chain, and suppressed the peak plasma level of the
drugs following oral administration of the acylated .beta.-CyD
complexes in dogs. Among acylated .beta.-CyDs, perbutanoyl
.beta.-CyD showed the most prominent retarding effect owing to its
superior mucoadhesive property and hydrophobicity. On the other hand,
perpentanoyl .beta.-CyD formed an adhesive thin-film on water surface,
when its benzene soln. was spread on water and the benzene was evapd.
Molsidomine was incorporated in the film of perpentanoyl .beta.-CyD, from
which the drug was slowly released. The results suggest that
acylated .beta.-Cyds, particularly perbutanoyl and perpentanoyl
.beta.-CyDs, may be useful in modifying the release rate of water-sol.
drugs as a novel slow-release carrier.

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
 RN 42399-41-7 REGISTRY
 CN 1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, (2S,3S)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,5-Benzothiazepin-4(5H)-one, 3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, (2S-cis)-
 OTHER NAMES:
 CN (+)-cis-Diltiazem
 CN (+)-Diltiazem
 CN Adizem XL
 CN Coras
 CN d-cis-Diltiazem
 CN d-Diltiazem
 CN Diltiazem
 CN Dilzem
 FS STEREOSEARCH
 MF C22 H26 N2 O4 S
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSChem, CSNB, DDFU, DIOGENES, DRUGPAT, DRUGU, EMBASE, IFICDB, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PHAR, PHARMASEARCH, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).

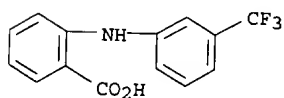


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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4142 REFERENCES IN FILE CA (1957 TO DATE)
 62 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 4146 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
 RN 530-78-9 REGISTRY
 CN Benzoic acid, 2-[[3-(trifluoromethyl)phenyl]amino]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Anthranilic acid, N-(.alpha.,.alpha.,.alpha.-trifluoro-m-tolyl)- (6CI, 8CI)
 OTHER NAMES:
 CN 2-[3-(Trifluoromethyl)anilino]benzoic acid
 CN 2-[[3-(Trifluoromethyl)phenyl]amino]benzoic acid
 CN 3'-Trifluoromethyl-N-phenylanthranilic acid
 CN 3'-Trifluoromethyldiphenylamine-2-carboxylic acid
 CN Achless
 CN Ansatin
 CN ANT-1
 CN Arlef
 CN C.I. 440
 CN CI 440
 CN CN 27544
 CN Flufenamic acid
 CN Fluphenamic acid
 CN Fullsafe
 CN INF 1837
 CN Meralen
 CN Movilizin
 CN N-(.alpha.,.alpha.,.alpha.-Trifluoro-m-tolyl)anthranilic acid
 CN N-(m-Trifluoromethylphenyl)-2-aminobenzoic acid
 CN N-[3-(Trifluoromethyl)phenyl]anthranilic acid
 CN NSC 82699
 CN Paraflu
 CN Parlef
 CN Parlif
 CN Pinox
 CN Plostene
 CN Ristogen
 CN Sastridex
 CN Surika
 CN Tecramine
 FS 3D CONCORD
 MF C14 H10 F3 N O2
 CI COM
 LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NIOSHTIC, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
 (*File contains numerically searchable property data)
 Other Sources: EINECS**, WHO
 (**Enter CHEMLIST File for up-to-date regulatory information)



mw =

178
 65
 32

 275

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 68630-75-1 REGISTRY
CN 1-9-Luteinizing hormone-releasing factor (swine), 6-[O-(1,1-dimethylethyl)-D-serine]-9-(N-ethyl-L-prolinamide)-, monoacetate (salt) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Luteinizing hormone-releasing factor (pig), 6-[O-(1,1-dimethylethyl)-D-serine]-9-(N-ethyl-L-prolinamide)-10-deglycinamide-, monoacetate (salt)

OTHER NAMES:

CN 1-9-Luteinizing hormone-releasing factor (pig), 6-[O-(1,1-dimethylethyl)-D-serine]-9-(N-ethyl-L-prolinamide)-, monoacetate (salt)

CN Buserelin acetate

CN Estomal

CN Suprafact

CN Suprecur

FS PROTEIN SEQUENCE; STEREOSEARCH

DR 131378-79-5

MF C60 H86 N16 O13 . C2 H4 O2

CI COM

LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CBNB, CHEMCATS, CIN, DRUGPAT, EMBASE, IPA, MRCK*, PHAR, PROMT, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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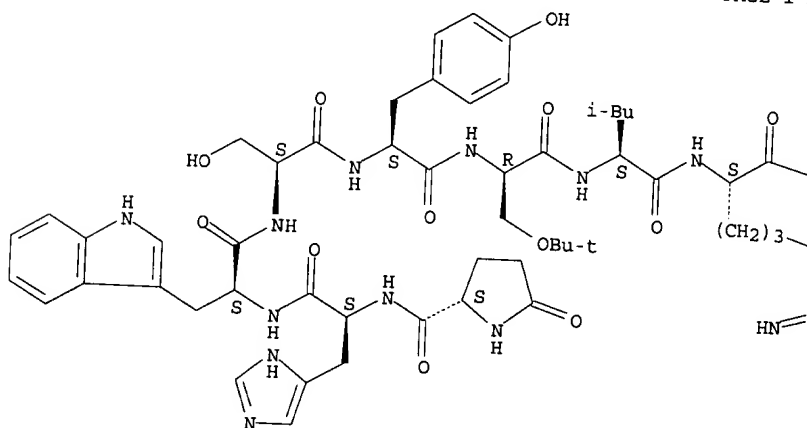
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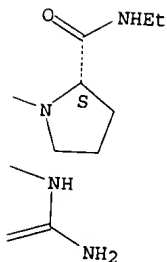
Absolute stereochemistry.

PAGE 1-A



C₆₂ H₈₈ N₁₆ O₁₅
90

PAGE 1-B



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Ethanol (9CI)
 MF C2 H6 O
 CI COM

cpds from
 PCT

H₃C-CH₂-OH

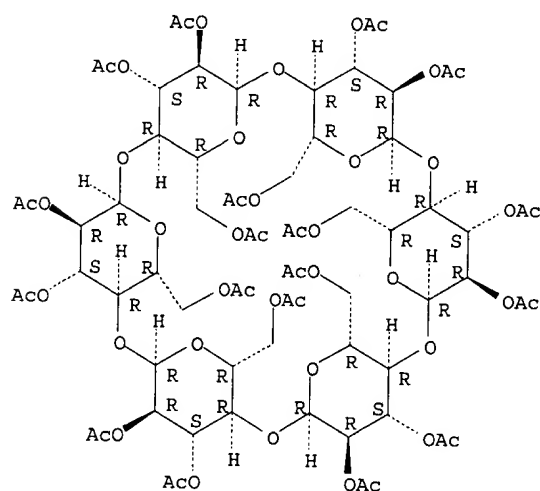
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):44

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Prosta-10,13-dien-1-oic acid, 15-hydroxy-9-oxo-, (13E,15S)-, compd. with
 .alpha.-cyclodextrin octadecaacetate (10:1) (9CI)
 MF C72 H96 O48 . 10 C20 H32 O4

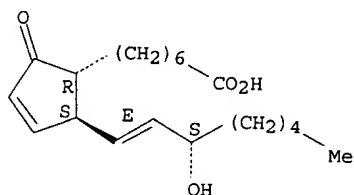
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Absolute stereochemistry.



CM 2

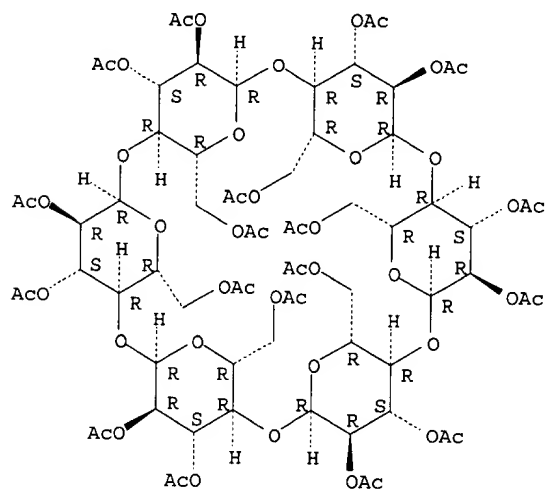
Absolute stereochemistry.
 Double bond geometry as shown.



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Prosta-10,13-dien-1-oic acid, 15-hydroxy-9-oxo-, (13E,15S)-, compd. with
 .alpha.-cyclodextrin octadecaacetate (3:1) (9CI)
 MF C72 H96 O48 . 3 C20 H32 O4

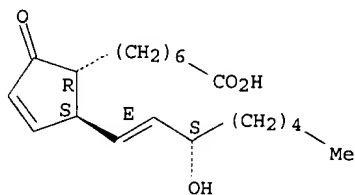
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Absolute stereochemistry.



CM 2

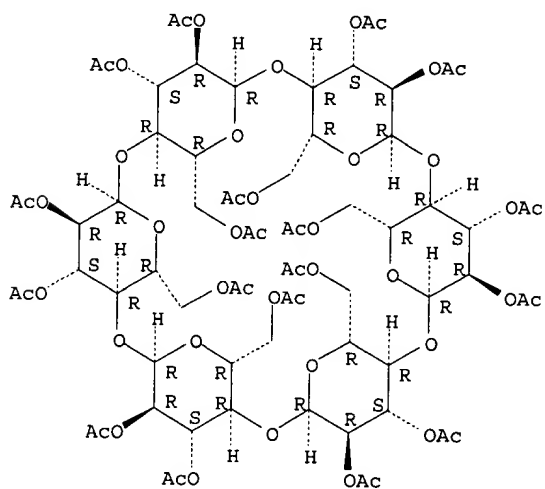
Absolute stereochemistry.
Double bond geometry as shown.



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11.alpha.,13E,15S)-,
compd. with .alpha.-cyclodextrin octadecaacetate (5:1) (9CI)
MF C72 H96 O48 . 5 C20 H34 O5

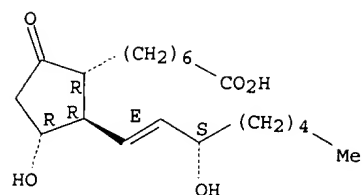
CM 1

Absolute stereochemistry.



CM 2

Absolute stereochemistry.
Double bond geometry as shown.

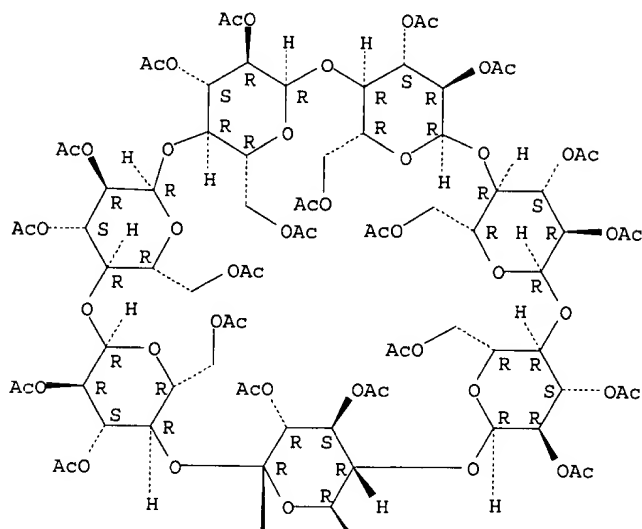


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN .beta.-Cyclodextrin, heneicosacetate, compd. with 1,4:3,6-dianhydro-D-glucitol 5-nitrate (9CI)
 MF C84 H112 O56 . x C6 H9 N O6

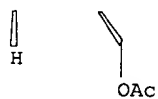
CM 1

Absolute stereochemistry.

PAGE 1-A

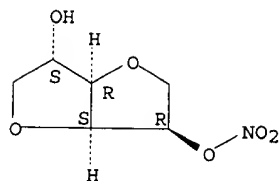


PAGE 2-A



CM 2

Absolute stereochemistry. Rotation (+).



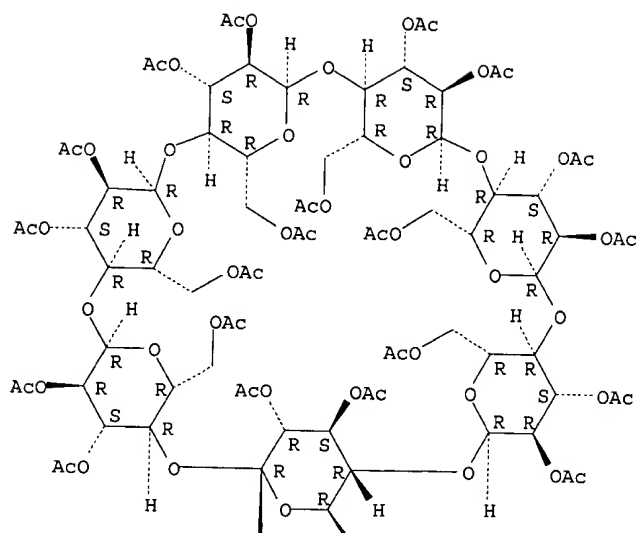
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN .beta.-Cyclodextrin, heneicosacetate, compd. with 1,2,3-propanetriyl trinitrate (9CI)

MF C84 H112 O56 . x C3 H5 N3 O9

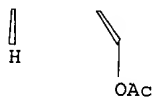
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Absolute stereochemistry.

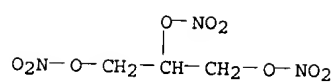
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PAGE 2-A

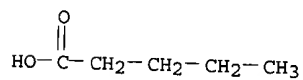


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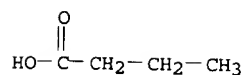
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Pentanoic acid, hydroxy-, polymer with hydroxybutanoic acid (9CI)
MF (C5 H10 O3 . C4 H8 O3)x
CI PMS

CM 1



D1-OH

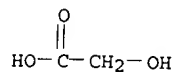
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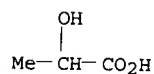
D1-OH

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI)
 MF (C3 H6 O3 . C2 H4 O3)x
 CI PMS, COM

CM 1



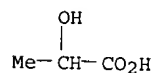
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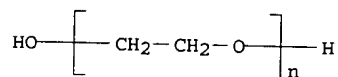
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Propanoic acid, 2-hydroxy-, homopolymer (9CI)
 MF (C3 H6 O3)x
 CI PMS, COM

RELATED POLYMERS AVAILABLE WITH POLYLINK

CM 1

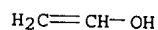


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF (C2 H4 O)n H2 O
 CI PMS, COM

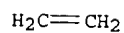


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Ethenol, polymer with ethene (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF (C2 H4 O . C2 H4)x
 CI PMS, COM

CM 1

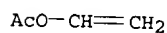


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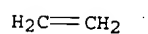


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Acetic acid ethenyl ester, polymer with ethene (9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF (C4 H6 O2 . C2 H4)x
CI PMS, COM

CM 1

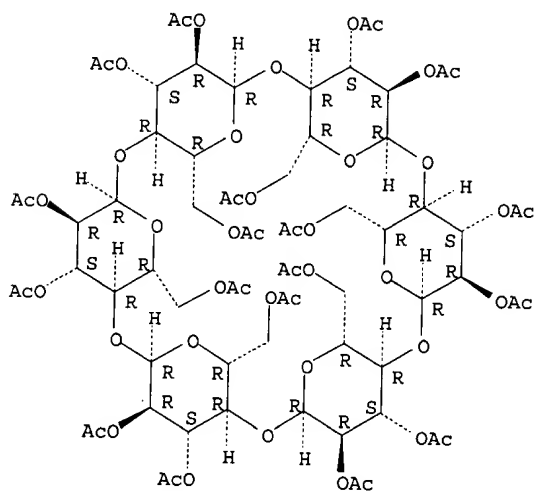


CM 2



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN .alpha.-Cyclodextrin, octadecaacetate (8CI, 9CI)
MF C72 H96 O48
CI COM

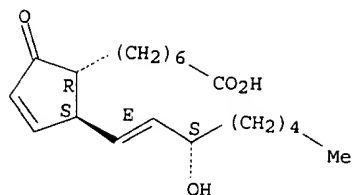
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Prosta-10,13-dien-1-oic acid, 15-hydroxy-9-oxo-, (13E,15S)- (9CI)
MF C20 H32 O4
CI COM

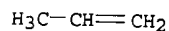
Absolute stereochemistry.
Double bond geometry as shown.



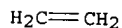
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN 1-Propene, polymer with ethene (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF (C3 H6 . C2 H4)x
 CI PMS, COM

CM 1



CM 2

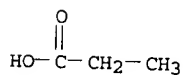


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Cellulose, propanoate (9CI)
 MF C3 H6 O2 . x Unspecified
 CI COM

CM 1

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

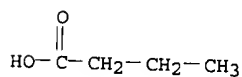


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Cellulose, acetate butanoate (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF C4 H8 O2 . x C2 H4 O2 . x Unspecified
 CI COM

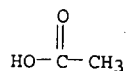
CM 1

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2



CM 3

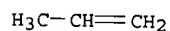


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Cellulose (8CI, 9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF Unspecified
 CI PMS, COM, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

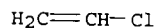
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN 1-Propene, homopolymer (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF (C3 H6)x
 CI PMS, COM

CM 1



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Ethene, chloro-, homopolymer (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF (C2 H3 Cl)x
 CI PMS, COM

CM 1

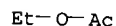


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Water (8CI, 9CI)
 MF H2 O
 CI COM



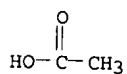
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

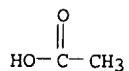
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Acetic acid ethyl ester (8CI, 9CI)
 MF C4 H8 O2
 CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

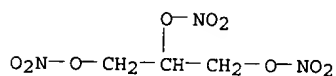
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Acetic acid (7CI, 8CI, 9CI)
 MF C2 H4 O2
 CI COM





PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN 1,2,3-Propanetriol, trinitrate (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF C3 H5 N3 O9
 CI COM

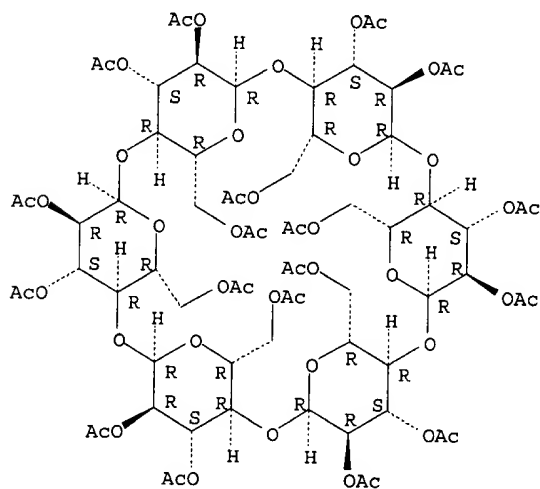


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Prosta-10,13-dien-1-oic acid, 15-hydroxy-9-oxo-, (13E,15S)-, compd. with
 .alpha.-cyclodextrin octadecaacetate (5:1) (9CI)
 MF C72 H96 O48 . 5 C20 H32 O4

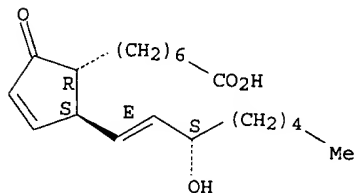
CM 1

Absolute stereochemistry.



CM 2

Absolute stereochemistry.
 Double bond geometry as shown.

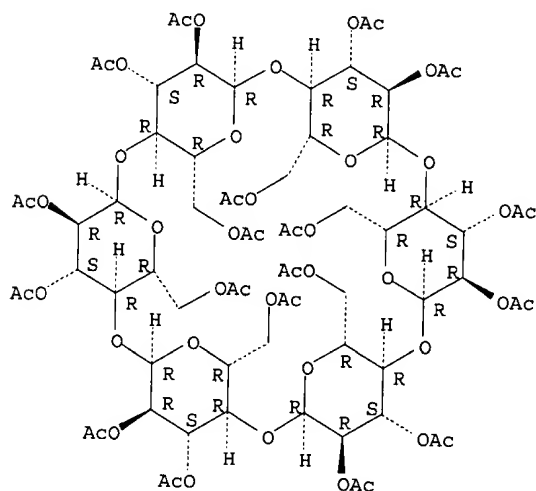


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11.alpha.,13E,15S)-,

compd. with .alpha.-cyclodextrin octadecaacetate (10:1) (9CI)
MF C72 H96 O48 . 10 C20 H34 O5

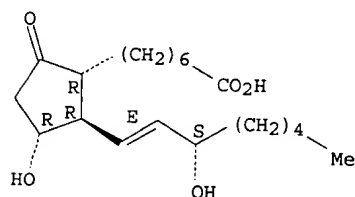
CM 1

Absolute stereochemistry.



CM 2

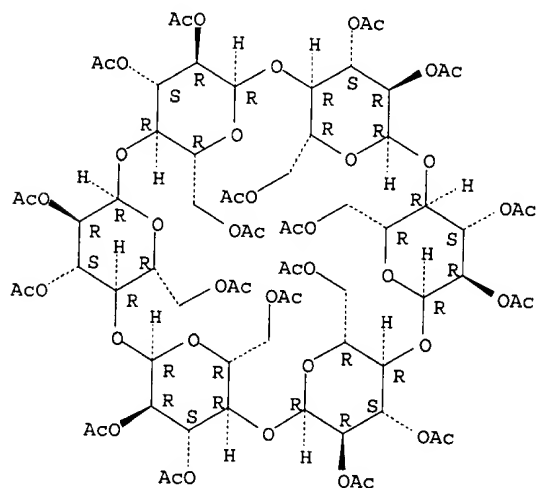
Absolute stereochemistry.
Double bond geometry as shown.



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11.alpha.,13E,15S)-,
compd. with .alpha.-cyclodextrin octadecaacetate (3:1) (9CI)
MF C72 H96 O48 . 3 C20 H34 O5

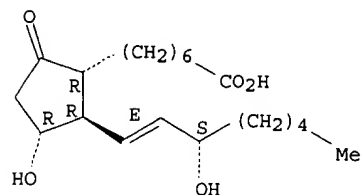
CM 1

Absolute stereochemistry.



CM 2

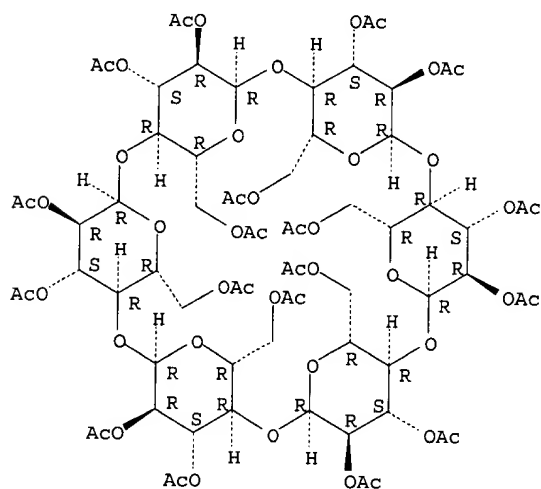
Absolute stereochemistry.
Double bond geometry as shown.



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN .alpha.-Cyclodextrin, octadecaacetate, compd. with 1,4:3,6-dianhydro-D-glucitol 5-nitrate (9CI)
MF C72 H96 O48 . x C6 H9 N O6

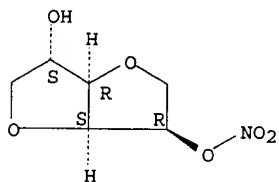
CM 1

Absolute stereochemistry.



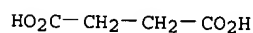
CM 2

Absolute stereochemistry. Rotation (+).

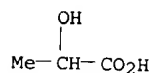


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Butanedioic acid, polymer with 2-hydroxypropanoic acid (9CI)
MF (C4 H6 O4 . C3 H6 O3)x
CI PMS

CM 1

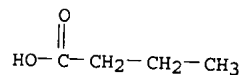


CM 2



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Butanoic acid, hydroxy-, homopolymer (9CI)
MF (C4 H8 O3)x
CI PMS

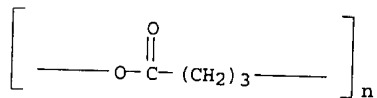
CM 1



D1-OH

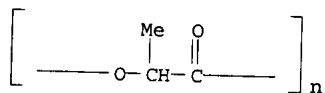
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Poly[oxy(1-oxo-1,4-butanediyl)] (9CI)
MF (C4 H6 O2)n
CI PMS

RELATED POLYMERS AVAILABLE WITH POLYLINK



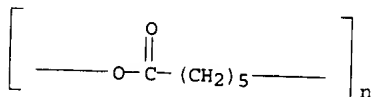
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] (8CI, 9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF (C3 H4 O2)n
CI PMS, COM

RELATED POLYMERS AVAILABLE WITH POLYLINK



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Poly[oxy(1-oxo-1,6-hexanediyl)] (9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF (C6 H10 O2)n
CI PMS, COM

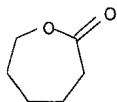
RELATED POLYMERS AVAILABLE WITH POLYLINK



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN 2-Oxepanone, homopolymer (9CI)
 MF (C6 H10 O2)x
 CI PMS, COM

RELATED POLYMERS AVAILABLE WITH POLYLINK

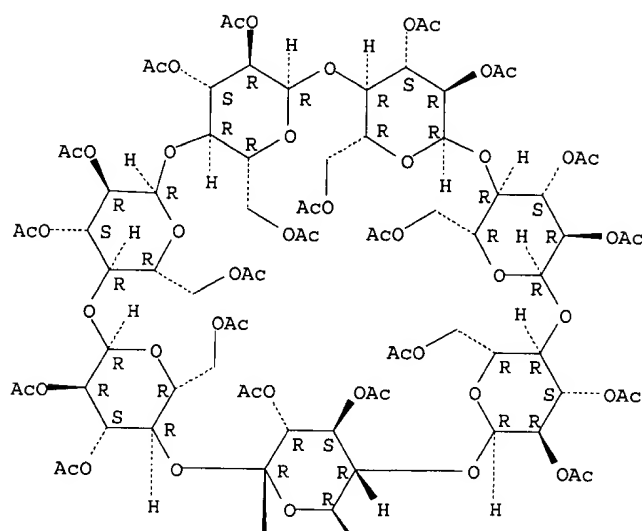
CM 1



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN .beta.-Cyclodextrin, heneicosacetate (8CI, 9CI)
 MF C84 H112 O56
 CI COM

Absolute stereochemistry.

PAGE 1-A



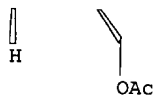
MW = 2016

1008

112

896

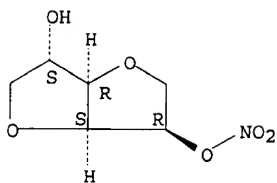
PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN D-Glucitol, 1,4:3,6-dianhydro-, 5-nitrate (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF C6 H9 N O6
 CI COM

Absolute stereochemistry. Rotation (+).



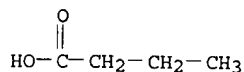
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Cellulose, butanoate (9CI)
 MF C4 H8 O2 . x Unspecified
 CI COM

CM 1

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Starch (8CI, 9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF Unspecified
 CI COM, MAN

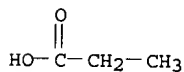
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Cellulose, acetate propanoate (9CI)
 MF C3 H6 O2 . x C2 H4 O2 . x Unspecified
 CI COM

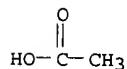
CM 1

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2



CM 3

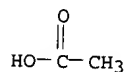


L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
 IN Cellulose, acetate (9CI)
 ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
 MF C2 H4 O2 . x Unspecified
 CI COM

CM 1

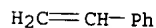
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2



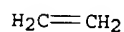
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Benzene, ethenyl-, homopolymer (9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF (C8 H8)x
CI PMS, COM

CM 1



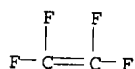
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Ethene, homopolymer (9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF (C2 H4)x
CI PMS, COM

CM 1



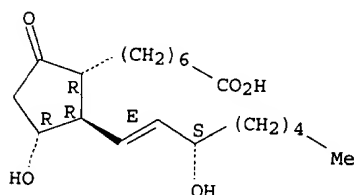
L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Ethene, tetrafluoro-, homopolymer (9CI)
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT
MF (C2 F4)x
CI PMS, COM

CM 1



L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11.alpha.,13E,15S)- (9CI)
MF C20 H34 O5
CI COM

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Acetic acid, methyl ester (6CI, 8CI, 9CI)